

USEPA REGION 2 EQUIPMENT LOAN PROGRAM FOR CITIZEN SCIENCE WATER MONITORING

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I. PURPOSE OF THE EPA EQUIPMENT LOAN PROGRAM FOR CITIZEN SCIENCE WATER MONITORING

The U.S. Environmental Protection Agency (EPA) has identified improving water quality as one of its highest priorities. The agency recognizes the value of monitoring data in guiding EPA, states and tribes in efforts to improve the health of the Nation's waters. There are waters, however, that States, Tribal Nations and EPA are not able to monitor at all or only on a very limited basis. In U.S EPA Region 2, volunteer water monitoring groups have played a valuable role in supplementing available monitoring data to our state regulatory agencies for over twenty years.

Recently, the focus in U.S EPA Region 2 has been on citizen scientists/community groups who have long collected data to better understand their local environment and address issues of concern to them. These projects conducted by volunteers with or without the assistance of government or academia, have been remarkably successful in expanding scientific knowledge, raising people's awareness about their environment and leveraging change over the past decade.

With this equipment loan program, U.S EPA Region 2 will continue to support the work of the volunteer water monitoring organizations to meet the goal of expanding the number waters which are monitored, and welcome the new citizen scientists/community groups to participate in water quality monitoring studies within their communities.

In **2017**, priority will be given to groups monitoring urban waters and/or waters in Environmental Justice areas, including Tribal Nations. The ultimate goal of the citizen science equipment loan program is to provide the tools and a framework to enable citizens to take an active role in their community and watershed by providing quality data to enhance environmental stewardship, create healthy, sustainable communities and to collaborate with government at all levels in protecting the environment. The equipment loan program will allow citizen scientists to have access to uniform monitoring equipment and methodologies to collect data that can have a meaningful impact in their communities.

II. EQUIPMENT AVAILABLE FOR LOAN

This loan program is restricted to equipment only, and does not include expendable supplies (e.g. gloves, calibration standards, disposable pipettes, etc.). EPA cannot loan computers or cameras.

The equipment loaned in **2017** will be limited to water quality meters, equipment to run laboratory bacterial tests, GPS units, turbidity tubes, and benthic macroinvertebrate

collection equipment. The available list of equipment may be expanded in subsequent years to allow citizen scientists/community groups to access to nutrient analysis equipment; air monitoring; and other types of water quality monitoring. There will be 10 sets of equipment to loan this year. Five (5) sets of equipment will be available for use in New York and New Jersey; four (4) sets for Puerto Rico; and one (1) set for the Virgin Islands.

III. ELIGIBILITY OF CITIZEN SCIENCE MONITORING GROUPS

The equipment loan program is open to all citizen scientists/community groups in U.S EPA Region 2 (New York, New Jersey, Puerto Rico, and the US Virgin Islands) and Tribal Nations throughout Region 2, including those coordinated by states, municipalities, universities, and other organizations. The equipment loan program is open to groups with a wide spectrum of experience levels – those that are just getting started as well as those with extensive experience.

As part of the loan program, selected groups must prepare a Quality Assurance Project Plan (QAPP). A QAPP is required for any project that uses or collects environmental information. If a group is just getting started in monitoring (water and/or air), the QAPP will need to be in place before the loan of the equipment.

The U.S. EPA Region 2 has created a Guidance for the Development of a QAPP for Citizen Science Projects. The QAPP uses a template format and includes a citizen science project example. The new guidance complies with EPA Quality Assurance (QA) requirements, but streamlines existing guidance for ease of preparation and use. The QAPP Guidance can be accessed at <https://www.epa.gov/citizen-science/quality-assurance-template-citizen-science-projects>.

For the **2017 EPA Region 2 Equipment Loan Program**, selected groups are being asked to share their final data, along with a Final Report, with the U.S. EPA Region 2. This request comes in the context of gathering citizen science information to support the Agency's efforts in determining how best to work with communities to promote an understanding of the data they collect, and assist the U.S. EPA Region 2 in evaluating future needs for our Equipment Loan Program. Groups will be asked to assess, quality assure and enter their data into an EPA developed data template. U.S. EPA Region 2 will then load the data into WQX/STORET.

IV. SELECTION PROCESS

Organizations that are eligible include:

- Organizations that currently provide monitoring data to a State or Tribal agency; are seeking to upgrade the type of methods used, and expand the number or types of monitoring sites.
- Sites within an EJ Community and Tribal Nations will receive priority under the equipment loan program, but all groups operating within the EPA Region 2 area may apply.

- Organizations who perform monitoring and need equipment, both new and established. Evidence of a commitment to undertake monitoring with a goal of producing data for long-term use, and meeting QA and data use requirements is necessary. New organizations will be given priority over prior participants in the loan program.
 - If the applicant is a prior recipient of the equipment loan program, they must have satisfied all of the loan requirements in their participating year.
 - If the applicant is a prior EPA grantee, they must be in good standing with their grant program.

Minimum criteria for ranking applications include the following:

- Complete application: Applications with incomplete or missing information may not be considered. **Make sure all required information is provided.** Applications will be considered as they are received, with no follow-up for missing information.
- Once applicants meet the eligibility requirements, the technical portion of the applications will be ranked based on the following criteria:
 - A defined project scope is presented
 - The project addresses local environmental concerns or public health issues
 - Critical parameter measurements are specified for the project
 - The project's outcome will impact a community in a significant way
 - The organization is qualified to carry out their proposed project

V. CONDITIONS OF EQUIPMENT LOAN AGREEMENT

- a. Equipment can only be loaned on a short term basis (**May – December of each calendar year for NY/NJ recipients and October – May of each calendar year for PR/VI recipients**).
- b. Each applicant is required to prepare a Quality Assurance Project Plan (QAPP) detailing the objectives of their study, and the specifics of the sample collection and analysis.
- c. Each applicant is required to participate in the EPA provided equipment training prior to the start of sampling.
- d. Applicant agrees to maintain equipment in good working condition.
- e. Equipment will be labeled as belonging to EPA and will remain EPA equipment for the duration of the loan.
- f. The applicant agrees to notify EPA upon loss or damage to the equipment. Damaged equipment may be repaired by EPA or may need to be returned to EPA without replacement, depending upon circumstances.

- g. A loan agreement (**See separate attachment: Form 1780/Terms and Conditions**) will be signed by the responsible leader/point of contact from the organization upon completion of the EPA training.
- h. Each applicant agrees to provide a **Final Report (Attachment 1 for Specific Report Elements)** detailing the objectives, results and impacts of their study. Partnering with a state agency and providing data that can be entered into EPA's national water quality database is encouraged.

VI. APPLICATION PROCEDURE & SCHEDULE

An application form is attached to this announcement. Applications should be limited to three pages, plus a copy of a site map.

Once applications are received, the Equipment Loan Application Review Committee will review and make recommendations on selections.

Applications will be accepted through close of business March 24, 2017, with selections to be announced by **April 6, 2017** for **New York and New Jersey** applicants. A signed copy of the application and QAPP can be submitted through email (preferred) or in hard copy to:

Rachael Graham, U.S EPA Region 2, 2890 Woodbridge Ave, Edison, NJ 08837

Email: graham.rachael@epa.gov

Website: www.epa.gov/citizenscience

Attachment 1
Final Report Elements

Report Elements

Itemize the information that will be included in the Final Report to U.S. EPA Region 2. This will include but is not limited to the following:

- Project Goals and Objectives
- Organizations Background
- Project Description (including Timeline)
- Summary of Results (including Field Data Sheets)
- Conclusion/Next Steps